Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2988	chitinase$1	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:36
L2	19146	barley	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:36
L3	3494	glucanase$1	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:36
L4	177023	psi or protein synthesis inhibit$8	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:36
L5	2278	afp or antifungal protein	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:36
L6	100	1 near6 (serratia or marcesens)	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:37
L7	58	1 near6 2	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:37
L8	141	3 near6 2	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:37
L9	17	4 near6 2	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:37
L10	28	5 near6 (aspergillus or giganteus)	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:37
L11	49	(6 and (7 or 8 or 9 or 10)) or (7 and (8 or 9 or 10)) or (8 and (9 or 10)) or (9 and 10)	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:38
L12	15	(6 or 7 or 8 or 9 or 10) same synerg$	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:39
L13	37	(6 or 7 or 8 or 9 or 10) same transgen$	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:39
L14	1579	(1 near10 (3 or 4 or 5)) or (3 near10 (4 or 5)) or (4 near10 5)	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:39
L15	25	14 near10 synerg$	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:39
L16	55	14 near10 transgen$	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:40
L17	122	11 or 12 or 13 or 15 or 16	US-PGPUB; USPAT	ADJ	OFF	2005/01/28 16:40

PGPUB-DOCUMENT-NUMBER: 20040268449

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040268449 A1

TITLE: Wheat variety 25R35

PUBLICATION-DATE: December 30, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lively, Kyle Jay	Tipton	IN	US	
Clarkson, Robert Lewis	Tipton	IN	US	
Laskar, William Joseph	Tipton	IN	US	
Marshall, Gregory Charles	Arcadia	IN	US	

APPL-NO: 10/ 795849.

DATE FILED: March 8, 2004

US-CL-CURRENT: 800/320.3, 435/410 , 435/430 , 435/430.1 , 800/260 , 800/266 , 800/278 , 800/284 , 800/295 , 800/298 , 800/300 , 800/301 , 800/302 , 800/303

ABSTRACT:

A wheat variety designated 25R35, the plants and seeds of wheat variety 25R35, methods for producing a wheat plant produced by crossing the variety 25R35 with another wheat plant, and hybrid wheat seeds and plants produced by crossing the variety 25R35 with another wheat line or plant, and the creation of variants by mutagenesis or transformation of variety 25R35. This invention also relates to methods for producing other wheat varieties or breeding lines derived from wheat variety 25R35 and to wheat varieties or breeding lines produced by those methods.

---------- KWIC ---------

Detail Description Paragraph - DETX (28):

[0052] Genes used to help reduce Fusarium head blight include but are not limited to Tri101(Fusarium), PDR5 (yeast), tlp-1(oat), tlp-2(oat), leaf tlp-1 (wheat), tlp (rice), tlp-4 (oat), endochitinase, exochitinase, glucanase (Fusarium), permatin (oat), seed hordothionin (barley), alpha-thionin (wheat), acid glucanase (alfalfa), chitinase (barley and rice), class beta II-1,3-glucanase (barley), PR5/tlp (arabidopsis), zeamatin (maize), type 1 RIP (barley), NPR1 (arabidopsis), lactoferrin (mammal), oxalyl-CoA-decarboxylase (bacterium), IAP (baculovirus), ced-9 (C. elegans), and glucanase (rice and barley).

PGPUB-DOCUMENT-NUMBER: 20040250309

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040250309 A1

TITLE: Novel compositions with chitinase activity

PUBLICATION-DATE: December 9, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Muller, Mathias L.	Santa Cruz	CA	US	
True, Thom	Santa Clara	CA	US	
Simmons, Carl R.	Des Moines	IA	US	
Yalpani, Nasser	Johnston	IA	US	

APPL-NO: 10/ 389432

DATE FILED: March 14, 2003

RELATED-US-APPL-DATA:

child 10389432 A1 20030314

parent continuation-of 10290086 20021106 US ABANDONED

non-provisional-of-provisional 60420666 20021022 US

non-provisional-of-provisional 60337029 20011107 US

US-CL-CURRENT: 800/278, 424/130.1 , 435/320.1 , 435/468 , 530/350 , 536/23.6 , 800/279 , 800/288 , 800/301

ABSTRACT:

The present invention provides compositions with chitinase activity and methods for using such compositions to enhance resistance of plants to fungal infections.

---------- KWIC --------

Detail Description Paragraph - DETX (142):

[0217] Other examples of proteins that may be used in combination with antifungal proteins according to the invention include, but are not limited to, .beta.-1,3-glucanases and other chitinases such as those obtainable from barley (Swegle M. et al, 1989, Plant Mol. Biol. 12, 403-412; Balance G. M. et al, 1976, Can. J. Plant Sci. 56, 459-466; Hoj P. B. et al, 1988, FEBS Lett. 230, 67-71; Hoj P. B. et al, 1989, Plant Mol. Biol. 13, 31-42 1989), bean (Boller T. et al, 1983, Planta 157, 22-31; Broglie K. E. et al. 1986, Proc. Natl. Acad. Sci. USA 83, 6820-6824; 1988 Planta 174, 364-372); Mauch F. & Staehelin L. A., 1989, Plant-Cell 1, 447-457); cucumber (Metraux J. P. & Boller T. (1986), Physiol. Mol. Plant Pathol. 28, 161-169); leek (Spanu P. et al, 1989, Planta 177, 447-455); maize (Nasser W. ti al, 1988, Plant Mol. Biol. 11, 529-538), oat (Fink W. et al, 1988, Plant Physiol. 88, 270-275), pea (Mauch F. et al 1984, Plant Physiol. 76, 607-611; Mauch F. et al, 1988, Plant Physiol. 87, 325-333), poplar (Parsons, T. J. et al, 1989, Proc. Natl. Acad. Sci.

USA. 86, 7895-7899), potato (Gaynor J. J. 1988, Nucl. Acids Res. 16, 5210; Kombrink E. et al 1988, Proc. Natl. Acad. Sci. USA 85, 782-786; Laflamme D. and Roxby R., 1989, Plant Mol. Biol. 13, 249-250), tobacco (e.g. Legrand M. et al 1987, Proc. Natl. Acad. Sci. USA 84, 6750-6754; Shinshi H. et al. 1987, Proc. Natl. Acad. Sci. USA 84, 89-93), tomato (Joosten M. H. A. & De Wit P. J. G. M. 1989, Plant Physiol. 89, 945-951), wheat (Molano J. et al, 1979, J. Biol. Chem. 254, 4901-4907), and the like.

PGPUB-DOCUMENT-NUMBER: 20040234516

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040234516 A1

TITLE: Production of lysosomal enzymes in plants by transient expression

PUBLICATION-DATE: November 25, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Garger, Stephen J.	Vacaville	CA	US	
Turpen, Thomas H.	Vacaville	CA	US	
Kumagai, Monto H.	Kailua	HI	US	

APPL-NO: 10/ 851388

DATE FILED: May 21, 2004

RELATED-US-APPL-DATA:

child 10851388 A1 20040521

parent continuation-of 10103327 20020320 US PENDING

child 10851388 A1 20040521

parent continuation-of 09993059 20011113 US PENDING

child 09993059 20011113 US

parent continuation-in-part-of 09626127 20000726 US PENDING

child 10103327

parent continuation-of 09993059 20011113 US PENDING

US-CL-CURRENT: 424/94.5, 435/193 , 435/419 , 435/468 , 435/69.1 , 536/23.2 , 800/284

ABSTRACT:

The invention relates to .alpha.-galactosidase truncated at the carboxy terminus and the production of enzymatically active recombinant human and animal lysosomal enzymes involving construction and expression of recombinant expression constructs comprising coding sequences of human or animal lysosomal enzymes in a plant expression system. The plant expression system provides for post-translational modification and processing to produce a recombinant gene product exhibiting enzymatic activity. The invention is demonstrated by working examples in which transgenic tobacco plants express recombinant expression constructs comprising human glucocerebrosidase nucleotide sequences. The invention is also demonstrated by working examples in which transfected tobacco plants express recombinant viral expression constructs comprising human a galactosidase nucleotide sequences. The recombinant lysosomal enzymes produced in accordance with the invention may be used for a variety of purposes, including but not limited to enzyme replacement therapy for the

therapeutic treatment of human and animal lysosomal storage diseases.

RELATED APPLICATIONS

[0001] The present application is a continuation of U.S. patent application Ser. No. 10/103,327, filed Mar. 20, 2002, and a continuation of U.S. patent application Ser. No. 09/993,059, filed Nov. 13, 2001, which is a continuation-in-part of U.S. patent application Ser. No. 09/626,127, filed Jul. 26, 2000; U.S. patent application Ser. No. 10/103,327, filed Mar. 20, 2002, is also a continuation of U.S. patent application Ser. No. 09/993,059, filed Nov. 13, 2001.

---------- KWIC ---------

Detail Description Paragraph - DETX (46):

[0107] Plant proteins do not require N-linked oligosaccharides for correct sorting into vacuoles (35,37,38). Some vacuolar proteins (osmotin, thaumatin, chitinase-I, glucanase-I and a barley lectin), contain sorting information in a CTPP of 7 to 22 AA in length. For several of these proteins secreted isoforms are synthesized without a CTPP domain. In other cases, experimental deletion of the CTPP results in secretion of the recombinant protein to the IF (45-48). Sorting of Gal-A to the lysosome is likely to occur by the well-characterized mannose-6-phosphate receptor pathway in mammalian cells. We hypothesize that a redundant sorting signal may exist in this carboxy-domain that also serves to reduce enzymatic activity in the ER lumen, golgi and trans-golgi network. This signal appears to function in plant cells, presumably for vacuolar localization.

Detail Description Paragraph - DETX (318):

[0366] 46. Melchers, L. S., Sela-Buurlage, M. B., Vloemans, S. A., Woloshuk, C. P., Van Roekel, J. S. C., Pen, J., Van den Elzen, P. J. M., Cornelissen, B. J. C. Extracellular targeting of the vacuolar tobacco proteins AP24, chitinase and .quadrature.-1,3-glucanase in transgenic plants. Plant Mol. Biol. 21:583, 1993.

PGPUB-DOCUMENT-NUMBER: 20040221348

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040221348 A1

TITLE: Wheat variety 25R54

PUBLICATION-DATE: November 4, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Marshall, Gregory Charles	Arcadia	IN	US	
Clarkson, Robert Lewis	Tipton	IN	US	
Laskar, William Joseph	Tipton	IN	US	
Lively, Kyle Jay	Tipton	IN	US	

APPL-NO: 10/ 795671

DATE FILED: March 8, 2004

US-CL-CURRENT: 800/320.3, 435/410 , 800/260 , 800/266 , 800/278 , 800/281 , 800/284 , 800/298 , 800/300 , 800/301 , 800/302 , 800/303

ABSTRACT:

A wheat variety designated 25R54, the plants and seeds of wheat variety 25R54, methods for producing a wheat plant produced by crossing the variety 25R54 with another wheat plant, and hybrid wheat seeds and plants produced by crossing the variety 25R54 with another wheat line or plant, and the creation of variants by mutagenesis or transformation of variety 25R54. This invention also relates to methods for producing other wheat varieties or breeding lines derived from wheat variety 25R54 and to wheat varieties or breeding lines produced by those methods.

---------- KWIC ---------

Detail Description Paragraph - DETX (28):

[0053] Genes used to help reduce Fusarium head blight include but are not limited to Tri101(Fusarium), PDR5 (yeast), tlp-1(oat), tlp-2(oat), leaf tip-1 (wheat), tip (rice), tip-4 (oat), endochitinase, exochitinase, glucanase (Fusarium), permatin (oat), seed hordothionin (barley), alpha-thionin (wheat), acid glucanase (alfalfa), chitinase (barley and rice), class beta 11-1,3-glucanase (barley), PR5/tlp (arabidopsis), zeamatin (maize), type 1 RIP (barley), NPR1 (arabidopsis), lactoferrin (mammal), oxalyl-CoA-decarboxylase (bacterium), IAP(baculovirus), ced-9 (C. elegans), and glucanase (rice and barley).

PGPUB-DOCUMENT-NUMBER: 20040210970

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040210970 A1

TITLE: Wheat variety XW01G

PUBLICATION-DATE: October 21, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lively, Kyle Jay	Tipton	IN	US	
Clarkson, Robert Lewis	Tipton	IN	US	
Laskar, William Joseph	Tipton	IN	US	
Marshall, Gregory Charles	Arcadia	IN	US	

APPL-NO: 10/ 852736

DATE FILED: May 24, 2004

US-CL-CURRENT: 800/320.3, 800/260 , 800/266 , 800/274 , 800/278 , 800/281 , 800/284 , 800/295 , 800/300 , 800/301 , 800/302 , 800/303

ABSTRACT:

A wheat variety designated XW01G, the plants and seeds of wheat variety XW01G, methods for producing a wheat plant produced by crossing the variety XW01G with another wheat plant, and hybrid wheat seeds and plants produced by crossing the variety XW01G with another wheat line or plant, and the creation of variants by mutagenesis or transformation of variety XW01G. This invention also relates to methods for producing other wheat varieties or breeding lines derived from wheat variety XWO1G and to wheat varieties or breeding lines produced by those methods.

---------- KWIC ---------

Detail Description Paragraph - DETX (15):

[0052] Genes used to help reduce Fusarium head blight include but are not limited to Tri101(Fusarium), PDR5 (yeast), tlp-1(oat), tlp-2(oat), leaf tip-1 (wheat), tip (rice), tip-4 (oat), endochitinase, exochitinase, glucanase (Fusarium), permatin (oat), seed hordothionin (barley), alpha-thionin (wheat), acid glucanase (alfalfa), chitinase (barley and rice), class beta II-1,3-glucanase (barley), PR5/tlp (arabidopsis), zeamatin (maize), type 1 RIP (barley), NPR1 (arabidopsis), lactoferrin (mammal), oxalyl-CoA-decarboxylase (bacterium), IAP(baculovirus), ced-9 (C. elegans), and glucanase (rice and barley).

PGPUB-DOCUMENT-NUMBER: 20040210969

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040210969 A1

TITLE: Wheat variety XW00D

PUBLICATION-DATE: October 21, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Marshall, Gregory Charles	Arcadia	IN	US	
Laskar, William Joseph	Tipton	IN	US	
Clarkson, Robert Lewis	Tipton	IN	US	
Lively, Kyle J.	Tipton	IN	US	

APPL-NO: 10/ 852651

DATE FILED: May 24, 2004

US-CL-CURRENT: 800/320.3, 430/420 , 435/410 , 435/468 , 800/260 , 800/266 , 800/274 , 800/278 , 800/281 , 800/284 , 800/295 , 800/300 , 800/301 , 800/302 , 800/303

ABSTRACT:

A wheat variety designated XW00D, the plants and seeds of wheat variety XW00D, methods for producing a wheat plant produced by crossing the variety XW00D with another wheat plant, and hybrid wheat seeds and plants produced by crossing the variety XW00D with another wheat line or plant, and the creation of variants by mutagenesis or transformation of variety XW00D. This invention also relates to methods for producing other wheat varieties or breeding lines derived from wheat variety XW00D and to wheat varieties or breeding lines produced by those methods.

---------- KWIC ---------

Detail Description Paragraph - DETX (28):

[0053] Genes used to help reduce Fusarium head blight include but are not limited to Tri101(Fusarium), PDR5 (yeast), tlp-1(oat), tlp-2(oat), leaf tlp-1(wheat), tlp (rice), tlp-4 (oat), endochitinase, exochitinase, glucanase (Fusarium), permatin (oat), seed hordothionin (barley), alpha-thionin (wheat), acid glucanase (alfalfa), chitinase (barley and rice), class beta II-1,3-glucanase (barley), PR5/tlp (arabidopsis), zeamatin (maize), type 1 RIP (barley), NPR1 (arabidopsis), lactoferrin (mammal), oxalyl-CoA-decarboxylase (bacterium), IAP(baculovirus), ced-9 (C. elegans), and glucanase (rice and barley).

PGPUB-DOCUMENT-NUMBER: 20040205866

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040205866 A1

TITLE: Wheat variety XW01F

PUBLICATION-DATE: October 14, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Edge, Benjamin Elexy III	Central	SC	US	
Laskar, William Joseph	Tipton	IN	US	
Marshall, Gregory Charles	Arcadia	IN	US	
Lively, Kyle Jay	Tipton	IN	US	

APPL-NO: 10/ 852742

DATE FILED: May 24, 2004

US-CL-CURRENT: 800/320.3, 435/410 , 435/468 , 800/260 , 800/266 , 800/274 , 800/278 , 800/295 , 800/300 , 800/301 , 800/302 , 800/303

ABSTRACT:

A wheat variety designated XW01F, the plants and seeds of wheat variety XW01F, methods for producing a wheat plant produced by crossing the variety XW01F with another wheat plant, and hybrid wheat seeds and plants produced by crossing the variety XW01F with another wheat line or plant, and the creation of variants by mutagenesis or transformation of variety XW01F. This invention also relates to methods for producing other wheat varieties or breeding lines derived from wheat variety XW01F and to wheat varieties or breeding lines produced by those methods.

---------- KWIC ---------

Detail Description Paragraph - DETX (15):

[0053] Genes used to help reduce Fusarium head blight include but are not limited to Tri101(Fusarium), PDR5 (yeast), tip-1(oat), tip-2(oat), leaf tip-1 (wheat), tip (rice), tip-4 (oat), endochitinase, exochitinase, glucanase (Fusarium), permatin (oat), seed hordothionin (barley), alpha-thionin (wheat), acid glucanase (alfalfa), chitinase (barley and rice), class beta II-1,3-glucanase (barley), PR5/tlp (arabidopsis), zeamatin (maize), type 1 RIP (barley), NPR1 (arabidopsis), lactoferrin (mammal), oxalyl-CoA-decarboxylase (bacterium), IAP(baculovirus), ced-9 (C. elegans), and glucanase (rice and barley).

PGPUB-DOCUMENT-NUMBER: 20040194172

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040194172 A1

TITLE: Wheat Variety XW02M

PUBLICATION-DATE: September 30, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Edge, Benjamin E. III	Central	SC	US	
Shields, Phil L.	Salisbury	MD	US	
Marshall, Gregory C.	Arcadia	IN	US	
Lively, Kyle J.	Tipton	IN	US	
Laskar, William J.	Tipton	IN	US	

APPL-NO: 10/ 842383

DATE FILED: May 10, 2004

US-CL-CURRENT: 800/320.3, 435/410 , 435/421 , 800/260 , 800/274 , 800/278 , 800/281 , 800/284 , 800/300 , 800/301 , 800/302 , 800/303

ABSTRACT:

A wheat variety designated XW02M, the plants and seeds of wheat variety XW02M, methods for producing a wheat plant produced by crossing the variety XW02M with another wheat plant, and hybrid wheat seeds and plants produced by crossing the variety XW02M with another wheat line or plant, and the creation of variants by mutagenesis or transformation of variety XW02M. This invention also relates to methods for producing other wheat varieties or breeding lines derived from wheat variety XW02M and to wheat varieties or breeding lines produced by those methods.

---------- KWIC ---------

Detail Description Paragraph - DETX (29):

[0054] Genes used to help reduce Fusarium head blight include but are not limited to Tri101(Fusarium), PDR5 (yeast), tip-1(oat), tip-2(oat), leaf tip-1 (wheat), tip (rice), tip-4 (oat), endochitinase, exochitinase, glucanase (Fusarium), permatin (oat), seed hordothionin (barley), alpha-thionin (wheat), acid glucanase (alfalfa), chitinase (barley and rice), class beta II-1,3-glucanase (barley), PR5/tip (arabidopsis), zeamatin (maize), type 1 RIP (barley), NPR1 (arabidopsis), lactoferrin (mammal), oxalyl-CoA-decarboxylase (bacterium), IAP(baculovirus), ced-9 (C. elegans), and glucanase (rice and barley).

PGPUB-DOCUMENT-NUMBER: 20040172678

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040172678 A1

TITLE: Transgenic plants for mitigating introgression of genetically engineered genetic traits

PUBLICATION-DATE: September 2, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gressel, Jonathan	Rehovot		IL	
Al-Ahmad, Hani	West Bank		IL	

APPL-NO: 10/ 774388

DATE FILED: February 10, 2004

RELATED-US-APPL-DATA:

child 10774388 A1 20040210

parent continuation-in-part-of 09889737 20010720 US ABANDONED

child 09889737 20010720 US

parent a-371-of-international PCT/IL00/00046 20000124 WO PENDING

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	DOC-ID	APPL-DATE
IL	128353	1999IL-128353	February 3, 1999

US-CL-CURRENT: 800/278

ABSTRACT:

Genetic mechanisms for mitigating the effects of introgression of a genetically engineered genetic trait of a cultivated crop to an undesirable, interbreeding related species.

[0001] This is a continuation-in-part of U.S. patent application Ser. No. 09/889,737, filed 24 Jan. 2000, which is a U.S. National Phase application of PCT/1L00/00046, filed 24 Jan., 2000, which claims priority from Israeli Patent Application No. 128353, filed 3 Feb., 1999.

---------- KWIC --------

Detail Description Table CWU - DETL (5):
6TABLE 6 Examples of primary genes inserted into rice for potentially commercial purposes - field tested in the USA Type of gene/Phenotype Gene(s) HIS #AP Herbicide Resistance Glyphosate EPSPS 03-190-04 Glufosinate CBI 03-112-03 Glufosinate Strep.phosphinothricin acetyl transferase 02-136-04 CBI.sup.a but presumably Protox CBI but presumably mutant protox gene

02-066-19 inhibiting herbicide R Disease Resistance (fungi) Rhizoctonia solani Arabidopsis glucanase + rice chitinase 03-078-11 Rhizoctonia solani + Pyricularra Bean chitinase + tobacco glucanase + barley thionin + alfalfa 03-078-10 oryzae glucanase + rice chitinases 96-051-05 Rhizoctonia solani barley thionin 01-127-06 Disease Resistance (bacteria) Xanthomonase oryzae CBI + rice SAR 8.2 + Arabidopsis SAR 8.2 03-140-02 Arabidopsis npr1 02-126-08 (leaf blight) rice Xa21 receptor kinase 01-122-10 Xanthomonas oryzae + Burkholderia barley thionin 01-127-06 glumae Insect Resistance Lepidopteran CBI 03-98-10 Coleopteran Cry IIIA 99-70-03 Cry IA(a) 93-056-02 Lepidopteran R Cry IA(a) 92-10-01 Other properties Yield increase CBI 03-203-08 maize ADP-glucose pyrophosphorylase 02-070-04 Male sterile CBI + organomercurylyase + mercuric 03-112-03 Heavy metal remediation ion reductase 03-058-01 Pharmaceuticals/enzymes human antitrypsin + CBI + Forsythia dirgent protein + Forsythia 01-206-01 laccase + human lactoferrin + human lysozyme + Forsythia pinoresinol reductase + Forsythia pinoresino/lariciresinol reductase + Forsythia secoisolariciresinol dehydrogenase human antithrombin + human antitrypsin + human serum 98-008-01 albumin human aminoglycoside-3'adenyltransferase + others above 96-355-01

PGPUB-DOCUMENT-NUMBER: 20040154050

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040154050 A1

TITLE: Wheat variety 25W41

PUBLICATION-DATE: August 5, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Marshall, Gregory Charles	Arcadia	IN	US	
Lively, Kyle Jay	Tipton	IN	US	
Laskar, William Joseph	Tipton	IN	US	
Clarkson, Robert Lewis	Tipton	IN	US	

APPL-NO: 10/ 795525

DATE FILED: March 8, 2004

US-CL-CURRENT: 800/278, 800/320.3

ABSTRACT:

A wheat variety designated 25W41, the plants and seeds of wheat variety 25W41, methods for producing a wheat plant produced by crossing the variety 25W41 with another wheat plant, and hybrid wheat seeds and plants produced by crossing the variety 25W41 with another wheat line or plant, and the creation of variants by mutagenesis or transformation of variety 25W41. This invention also relates to methods for producing other wheat varieties or breeding lines derived from wheat variety 25W41 and to wheat varieties or breeding lines produced by those methods.

---------- KWIC ---------

Detail Description Paragraph - DETX (29):

[0054] Genes used to help reduce Fusarium head blight include but are not limited to Tri101(Fusarium), PDR5 (yeast), tlp-1(oat), tlp-2(oat), leaf tip-1 (wheat), tip (rice), tip-4 (oat), endochitinase, exochitinase, glucanase (Fusarium), permatin (oat), seed hordothionin (barley), alpha-thionin (wheat), acid glucanase (alfalfa), chitinase (barley and rice), class beta II-1,3-glucanase (barley), PR5/tip (arabidopsis), zeamatin (maize), type 1 RIP (barley), NPR1 (arabidopsis), lactoferrin (mammal), oxalyl-CoA-decarboxylase (bacterium), /AP(baculovirus), ced-9 (C. elegans), and glucanase (rice and barley).

US-PAT-NO: 6846968

DOCUMENT-IDENTIFIER: US 6846968 B1

TITLE: Production of lysosomal enzymes in plants by transient expression

DATE-ISSUED: January 25, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Erwin; Robert L.	Davis	CA	N/A	N/A
Grill; Laurence K.	Vacaville	CA	N/A	N/A
Pogue; Gregory P.	Vacaville	CA	N/A	N/A
Turpen; Thomas H.	Vacaville	CA	N/A	N/A
Kumagai; Monto H.	Kailua	HI	N/A	N/A

APPL-NO: 09/ 626127

DATE FILED: July 26, 2000

PARENT-CASE:

PRIORITY DATA

The present application is a continuation-in-part of application Ser. No. 09/316,572, filed May 21, 1999, now abandoned, which is a continuation of application Ser. No. 08/324,003, filed Oct. 14, 1994, now U.S. Pat. No. 5,977,438, which is a continuation-in-part of application Ser. No. 08/176,414, filed on Dec. 29, 1993, now U.S. Pat. No. 5,811,653, which is a continuation-in-part of application Ser. No. 07/997,733, filed Dec. 30, 1992, now abandoned. Application Ser. No. 08/324,003, filed Oct. 14, 1994, now U.S. Pat. No. 5,977,438 is also a continuation-in-part of application Ser. No. 08/184,237, filed Jan. 19, 1994, now U.S. Pat. No. 5,589,367, which is a continuation-in-part of application Ser. No. 07/923,692, filed Jul. 31, 1992, now U.S. Pat. No. 5,316,931, which is a continuation-in-part of applications Ser. No. 07/600,244, filed Oct. 22, 1990, now abandoned, Ser. No. 07/641,617, filed Jan. 16, 1991, now abandoned, application Ser. No. 07/737,899, filed Jul. 26, 1991, now abandoned, and application Ser. No. 07/739,143, filed Aug. 1, 1991, now abandoned. Application Ser. No. 07/600,244 is a continuation of application Ser. No. 07/310,881, filed Feb. 17, 1989, now abandoned, which is a continuation-in-part of applications Ser. No. 07/160,766 and Ser. No. 07/160,771, both filed on Feb. 26, 1988 and now abandoned. Application Ser. No. 07/641,617 is a continuation of application Ser. No. 07/347,637, filed May 5, 1989, now abandoned. Application Ser. No. 07/737,899 is a continuation of application Ser. No. 07/363,138, filed Jun. 8, 1989, now abandoned, which is a continuation-in-part of application Ser. No. 07/219,279, filed Jul. 15, 1988, now abandoned. Application Ser. No. 07/739,143 is a continuation-in-part of applications Ser. No. 07/600,244, filed Oct. 22, 1990, now abandoned, Ser. No. 07/641,617, filed Jan. 16, 1991, now abandoned, and Ser. No. 07/737,899, filed Jul. 26, 1991, now abandoned. All of the above referenced priority applications are incorporated herein by reference in their entirety.

US-CL-CURRENT: 800/260, 435/320.1 , 435/419 , 435/440 , 435/468 , 536/23.1 , 536/24.1 , 800/277 , 800/278

ABSTRACT:

The invention relates to the production of enzymatically active recombinant human and animal lysosomal enzymes involving construction and expression of recombinant expression constructs comprising coding sequences of human or animal lysosomal enzymes in a plant expression system. The plant expression system provides for post-translational modification and processing to produce a recombinant gene product exhibiting enzymatic activity. The invention is demonstrated by working examples in which transgenic tobacco plants express recombinant expression constructs comprising human glucocerebrosidase nucleotide sequences. The invention is also demonstrated by working examples in which transfected tobacco plants express recombinant viral expression constructs comprising human .alpha. galactosidase nucleotide sequences. The recombinant lysosomal enzymes produced in accordance with the invention may be used for a variety of purposes, including but not limited to enzyme replacement therapy for the therapeutic treatment of human and animal lysosomal storage diseases.

7 Claims, 18 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 18

---------- KWIC --------

Detailed Description Text - DETX (13):
Plant proteins do not require N-linked oligosaccharides for correct sorting into vacuoles (35,37,38). Some vacuolar proteins (osmotin, thaumatin, chitinase-I, glucanase-I and a barley lectin), contain sorting information in a CTPP of 7 to 22 AA in length. For several of these proteins secreted isoforms are synthesized without a CTPP domain. In other cases, experimental deletion of the CTPP results in secretion of the recombinant protein to the IF (45-48). Sorting of Gal-A to the lysosome is likely to occur by the well-characterized mannose-6-phosphate receptor pathway in mammalian cells. We hypothesize that a redundant sorting signal may exist in this carboxy-domain that also serves to reduce enzymatic activity in the ER lumen, golgi and terns-golgi network. This signal appears to function in plant cells, presumably for vacuolar localization.

Detailed Description Text - DETX (241):
LITERATURE CITED 1. Brady, R. O. Fabry Disease, In: Peripheral Neropathym 3rd ed., J. W. Griffin, P. A. Low, and J. F. Poduslo (eds.) W. B. Saunders. pp. 1169, 1993. 2. Desnick, R. J., Ioannou, Y. A., and Eng, C. M. Alpha-Galactosidase A Deficiency: Fabry Disease, In: The Metabolic Bases of Inherited Diseases, C. R. Scriver, A. L. Beaudet, W. S. Sly, D. Valle (eds.) McGraw-Hill, pp. 2741, 1995. 3. Brady, R. O. Sphingolipidoses, a Medical Progress Report. N. Engl. J. Med. 275: 312, 1966. 4. Brady R. O., Pentchev P. G., Gal A. E., Hibbert S. R., and Dekaban A. S. Replacement therapy for inherited enzyme deficiency: Use of purified glucocerebrosidase in Gaucher's disease. N. Engl. J. Med. 291:989, 1974. 5. Furbish F. S., Blair H. E., Shiloach J., Pentchev P. G., and Brady R. O. Enzyme replacement therapy in Gaucher's disease: Large-scale purification of glucocerebrosidase suitable for human administration. Proc. Natl. Acad. Sci. USA 74: 560, 1977. 6. Furbish F. S., Steer C. J., Krett N. L., and Barranger, J. A. Uptake and distribution of placental glucocerebrosidase in rat hepatic cells and effects of sequential deglycosylation. Biochim. Biophys. Acta 673: 425, 1981. 7. Barton, N. W., Furbish, F. S., Murray, G. J., Garfield, M., and Brady, R. O.

Therapeutic response to intravenous infusions of glucocerebrosidase in a patient with Gaucher disease. Proc. Natl. Acad. Sci. USA 87: 1913, 1990. 8. Barton, N. W, Brady, R. O., Dambrosia, J. M., DiBisceglie, A. M., Doppelt, S. H., Hill, S. C., Mankin, H. J., Murray, G. J., Parker, R. I., Argoff, C. E., Grewal, R. P., and Yu, K-T. Replacement therapy for inherited enzyme deficiency-nacrophage-targeted glucocerebrosidase for Gaucher's disease. N. Engl. J. Med. 324: 1464,1991. 9. Parker, R. I., Barton, N. W., Read, E. J., and Brady, R. O. Hematologic improvement in a patient with Gaucher's disease on long-term replacement therapy: Evidence for decreased splenic sequestration and improved red blood cell survival. Am. J. Hematol. 38: 130, 1991. 10. Hill, S. C., Parker, C. C., Brady, R. O., and Barton, N. W. MRI of multiple platyspondyly in Gaucher disease: Response to enzyme replacement therapy. J. Comput. Assist. Tomog. 17: 806, 1993. 11. Beutler, E., Kay, A., Saven, A., Garver, P., Thurston, D., Dawson, A., and Rosenbloom, B. Enzyme replacement therapy for Gaucher disease. Blood 78:1183, 1991. 12. Fallet, S., Grace, M. E., Sibille, A., Mendelson, D. S., Shapiro, R. S., Hermann, G., and Grabowski, G. A. Enzyme augmentation in moderate to life-threatening Gaucher disease. Pediatr. Res. 31: 496, 1992. 13. Mistry, P. K., Davies, S., Corfield, A., Dixon, A. K., and Cox, T. M. Successful treatment of bone marrow failure in Gaucher's disease with low-dose modified glucocerebrosidase. Quart. J. Med. New Series 84: 541, 1992. 14. Grabowski, G. A., Barton, N. W., Pastores, G.,Dambrosia, J. M., Baneijee, T. K., McKee, M. A., Parker, C., Schiffinann, R., Hill, S. C., Brady, R. O. Enzyme therapy in Type I Gaucher disease: Comparative efficacy of mannose-terminated glucocerebrosidase from natural and recombinant sources. Ann. Inter. Med. 122:33, 1995. 15. Hasholt L., Sorensen, S. A. A microtechnique for quantitative mesurements of acid hydrolases in fibroblasts. Its application in diagnosis of Fabry disease and enzyme replacement studies. Clin. Chim. Acta 142:257, 1984. 16. Mapes, C. A., Anderson, R. L., Sweeley, C. C., Desnick, R. J., Krivit, W. Enzyme replacement in Fabry's disease, an inborn error of metabolism. Science 169:987, 1970. 17. Brady, R. O., Tallman, J. F., Johnson, W. G., Gal, A. E., Leahy, W. R., Quirk, J. M., Dekaban, A. S. Replacement therapy for inherited enzyme deficiency: Use of purified ceramidetrihexosidease in Fabry's disease. N. Eng. J. Med. 289:9, 1973. 18. Desnick, R. J., Dean, K. J., Grabowski, G. A., Bishop, D. F., Sweeley, C. C. Enzyme therapy XII: Enzyme therapy in Fabry's disease: Differential enzyme and substrate clearance kinetics of plasma and splenic Alpha-galactosidase isozymes. Proc. Natl. Acad. Sci USA 76:5326, 1979. 19. Beutler, E. The cost of treating Gaucher disease. Nature Medicine 2:523, 1996. 20. NIH Technology Assessment Panel on Gaucher Disease. Gaucher Disease: Current issues in diagnosis and treatment. JAMA 275:548, 1995. 21. Hiatt, A., Cafferkey, R., and Bowdish, K. Production of antibodies in transgenic plants. Nature 342:76, 1989. 22. Assembly of multimeric proteins in plant cells: Characteristics and uses of plant-derived antibodies, In: Transgenic Plants, Fundamentals and Applications, A. Hiatt, (ed.) Marcel Dekker, Inc. New York, N.Y. pp. 221, 1992. 23. Ma, J. K.-C., and Hein, M. B. Plant antibodies for immunotherapy. Plant Physiol. 109:341, 1995. 25 Sijmons, P. C., Dekker, B. M. M., Schrammeijer, B., Verwoerd, T. C., van den Elzen, P. J. M., and Hoekema, A. Production of correctly processed human serum albumin in transgenic plants. Bio/Technology 8:217, 1990. 26 Mason, H. S., Lam D. M.-K., and Arntzen, C. J. Expression of hepatitis B surface antigen in transgenic plants. Proc. Natl. Acad. Sci. USA 89:11745, 1992. 27 Haq, T. A., Mason, H. S., Clements, J. D., and Arntzen, C. J. Oral immunization with a recombinant bacterial antigen produced in transgenic plants. Science 268:714, 1995. 28 Turpen, T. H., Reint, S. J., Charoenvit, Y., Hoffman, S. L., Fallarme, V., and Grill, L. K. Malarial epitopes expressed on the surface of recombinant tobacco mosaic virus. Bio/Technology 13:53, 1995. 29 Kumagai, M. H., Turpen, T. H., Weinzettl, N., della-Cioppa, G., Turpen, A. M., Donson, J., Hilf, M. E., Grantham, G. L., Dawson, W. O.; Chow, T. P., Piatak Jr., M., and Grill, L. K. Rapid, high level expression of biologically active

.alpha.-trichosanthin in transfected plants by a novel RNA viral vector. Proc. Natl. Acad. Sci. USA 90:427, 1993. 30 Turpen, T. H., and Dawson, W. O Amplification, movement and expression of genes in plants by viral-based vectors, In: Transgenic Plants, Fundamentals and Applications, A. Hiatt, (ed.) Marcel Dekker, Inc. New York, N.Y. pp. 195, 1992. 31 Sugimoto, Y., Aksentijevich, I., Murray, G. J., Brady, R. O., Pastan, I., and Gottesman, M. M. Retroviral coexpression of a multidrug resistance gene (MDRI) and human Alpha-galactosidase A for gene therapy of Fabry disease. Human Gene Therapy 6:905, 1995. 32 O'Neill, S. D., Kumagai, M. H., Majumndar, A., Huang, N., Sutliff, T. D. and Rodriguez, R. L. The (.alpha.-amylase genes in Oryza sativa: Characterization of cDNA clones and mRNA expression during seed germination. Mol. Gen. Genet. 221:235, 1990. 33 Kumagai, M. H., Shah, M., Terashima, M., Vrkljan, Z., Whitaker, J. R., and Rodriguez, R. L. Expression and secretion of rice .alpha.-amylase by Saccharomyces cerevisiae. Gene 94:209, 1990. 34 Suzuki, K. Enzymatic diagnosis of sphingolipidoses. Meth. Enzy. 138:727, 1987. 35 Chrispeels, M. J. Sorting of proteins in the secretory system. Annu. Rev. Plant Physiol. Plant Mol. Biol. 42:21, 1991. 36 Ioannou, Y. A., Bishop, D. F., and Desnick, R. J. Overexpression of human Alpha-galactosidase A results in its intracellular aggregation, crystallization in lysosomes, and selective secretion. J. Cell Biol. 119:1137, 1992. 37 Dombrowski, J. E., and Raikhel, N. V. Protein targeting to the plant vacuole--a historical perspective. Brazilian Journal of Medical and Biological Research 29:413, 1996. 38 Kermode, A. R. Mechanisms of intracellular protein transport and targeting in plant cells. Crit. Rev. Plant Sci. 15:285, 1996. 39 Bishop, D. F., Calhoun, D. H., Bernstein, H. S., Hantzopoulos, P., Quinn, M., and Desnick, R. J. Human Alpha-galactosidase A: Nucleotide sequence of a cDNA clone encoding the mature enzyme. Proc. Natl. Acad. Sci. USA 83:4859, 1986. 40 Quinn, M., Hantzopoulos, P., Fidanza, V. and Calhoun, D. H. A genomic clone containing the promoter for the gene encoding the human lysosomal enzyme, Alpha-galactosidase A. Gene 58:177, 1987. 41 Coppola, G., Yan, Y., Hantzopoulos, P., Segura, E., Stroh, J. G., and Calhoun, D. H. Characterization of glycosylated and catalytically active recombinant human Alpha-galactosidase A using a baculovirus vector. Gene 144:197. 42 Miyamnura, N., Araki, E., Matsuda, K., Yoshimura, R., Furukawa, N., Tsuruzoe, K., Shirotani, T., Kishikawa, H., Yamaguchi, K., and Shichiri, M. A carboxy-terminal truncation of human Alpha-galactosidase A in a heterozygous female with Fabry disease and modification of the enzymatic activity by the carboxy-terminal domain. J. Clin. Invest. 18009, 1996. 43 National Research Council. Putting biotechnology to work. Bioprocess engineering. National Academy Press, Washington, D.C. 1992. 44 Prescribing Information, Ceredase.TM., (alglucerase injection). Genzyme Corporation, January 1995. 45 Wilkins, T., Bednarek, S. Y., Raikhel, N. V. Role of propetide glycan in post-translational processing and transport of barley lectin to vacuoles in transgenic tobacco. Plant Cell 2:301, 1990. 46 Melchers, L. S., Sela-Buurlage, M. B., Vloemans, S. A., Woloshuk, C. P., Van Roekel, J. S. C., Pen, J., Van den Elzen, P. J. M., Cornelissen, B. J. C. Extracellular targeting of the vacuolar tobacco proteins AP24, chitinase and .beta.-1,3-glucanase in transgenic plants. Plant Mol. Biol. 21:583, 1993. 47 Sato, F., Koiwa, H., Sakai, Y., Kato, N., Yamada, Y. Synthesis and secretion of tobacco neutral PR-5 protein by transgenic tobacco and yeast. Biochem. Biophys. Res. Comm. 211:909,1995. 48 Maggio, A., D'Urzo, M. P., Abad, L. R., Takeda, S., Hasegawa, P. M., and Bressan, R. Large quantities of recombinant PR-5 proteins from the extracellular matrix of tobacco: Rapid production of microbial-recalcitrant proteins. Plant Mol. Biol. Rep. 14:249, 1996. 49 Calhoun, D. H., Bishop, D. F., Bernstein, H. S., Quinn, M., Hantzopoulos, P., Desnick, R. J. Fabry disease: Isolation of a cDNA clone encoding human Alpha-galactosidase A. Proc. Natl. Acad. Sci. USA 82:7364, 1985. 50 Jenkins, N., Parekh, R. B., James, D. C. Getting the glycosylation right: Implications for the biotechnology industry. Nature Biotech. 14:975, 1996. 51 Fitchette-Laine, A-C., Gomord, V., Chekkafi, A., and Faye, L.

Distribution of xylosylation and fucosylation in the plant Golgi apparatus. Plant J. 5:673, 1994. 52 Hein, M. B., Tang, Y., McLeod, D. A., Janda, K. D., Hiatt, A. C. Evaluation of immunoglobulins from plant cells. Biotechnol. Prog. 7:455, 1991. 53 Garcia-Casado, G. Sanchez-Monge, R., Chrispeels, M. J., Armentia, A., Salcedo, G., and Gomez, L. Role of complex asparagine-linked glycans in the allergenicity of plant glycoproteins. Glycobiol. 6:471, 1996. 54 Chrispeels, M. J., and Faye, L. The production of recombinant glycoproteins with defined non-immunogenic glycans, In: Transgenic Plants, A production system for industrial and pharmaceutical proteins. M. R. L. Owen and J. Pen, (eds.) John Wiley & Sons Ltd. pp. 99, 1996. 55 von Schaewen, A., Strum, A., O'Neill, J., Chrispeels, M. J. Isolation of a mutant Arabidopsis plant that lacks N-acetyl glucosaminyl transferase I and is unable to synthesize golgi-modified complex N-linked glycans. Plant Physiol. 102:1109, 1993. 56 Takasaki, S., Murray, G. J., Furbish, F. S., Brady, R. O., Bainanger, J. A., and Kobata, A. Structure of the N-asparagine-linked oligosaccharide units of human placental .alpha.-glucocerebrosidase. J. Biol. Chem. 259:10112, 1984. 57 Murray, G. J., Lectin-specific targeting of lysosomal enzymes to reticuloendothelial cells. Meth. Enzy. 149:25, 1987. 58 Ohshima, T., Murray, G. J., Nagle, J. W., Quirk, J. M., Kraus, M. H., Barton, N. W., Brady, R. O., and Kulkarni, A. B. Structural organization and expression of the mouse gene encoding Alpha-galactosidase A. Gene 166:277, 1995. 59 Horsch et al., Science 227 (1985) 1229-1231. 60 An, G., Watson, B D, Chiang, C C Plant Physiol 81 (1986) 301-305. 61 Gelvin, S B, Schilperoort, R A (eds.) Plant Molec Biol Manual (1988). 62 Kint, 1971, Arch. Int. Physiol. Biochem. 79:633-644. 63 Beutler & Kuhl, 1972, Amer. J. Hum. Genet. 24:237-249. 64 Romeo, et al., 1972, FEBS Lett. 27:161-166. 65 Wood & Nadler, 1972, Am. J. Hum. Genet. 24:250-255. 66 Ho, et al., 1972, Am. J. Hum. Genet. 24:256-266. 67 Desnick, et al., 1973, J. Lab. Clin. Med. 81:157-171. 68 Desnick, et al., 1989, in The Metabolic Basis of Inherited Disease, Scriver, C. R., 69 Beaudet, A. L. Sly, W. S. and Valle, D., eds, pp. 1751-1796, McGraw Hill, N.Y. 70 Kint, 1971; Arch. Int. Physiol. Biochem. 79:633-644). 71 Beutler & Kuhl, 1972, J. Biol.

US-PAT-NO: 6841720

DOCUMENT-IDENTIFIER: US 6841720 B1

TITLE: Inducible promoters

DATE-ISSUED: January 11, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Draper; John	Aberystwyth	N/A	N/A	GB
Kenton; Paul	Aberystwyth	N/A	N/A	GB
Darby; Robert	Aberystwyth	N/A	N/A	GB
Paul; Wyatt	Cambridge	N/A	N/A	GB

APPL-NO: 09/ 719002

DATE FILED: August 1, 2001

PARENT-CASE:

CROSS REFERENCE TO RELATED APPLICATIONS

The present application is the National Phase of International Application No. PCT/GB99/01949, filed Jun. 21, 1999, which was published in English.

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
GB	9813345	June 19, 1998

PCT-DATA:
APPL-NO: PCT/GB99/01949
DATE-FILED: June 21, 1999
PUB-NO: WO99/66057
PUB-DATE: Dec 23, 1999
371-DATE: Aug 1, 2001
102(E)-DATE:Aug 1, 2001

US-CL-CURRENT: 800/287, 435/252.3 , 435/320.1 , 435/419 , 435/468 , 536/24.1

ABSTRACT:

The present invention relates to inductible promoters for use in the control of heterologous genes in transformed plants. Suitable inducible promoters art those which are responsive to low levels of an environmentally acceptable and non-phytoxic inducing agent, and which also demonstrates a low level of developmentally or environmentally induced expression. A preferred prompter naturally drives the expression of a 21.3 kDa protein in Asparagus officinalis or an equivalent protein from the Lillaceae or Amaryllidaceae families. Under the control of a promoter of the invention, a gene will be expressed upon induction by SA or BTH, but preferably will not be developmentally expressed, systemically activated upon pathogen infection, or in response to ABA, ethylene, oxidative or osmotic stresses, or wounding.

17 Claims, 20 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 18

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Brief Summary Text - BSTX (16):

A number of elements present in PR gene promoters have been identified. The PR-2d gene (encoding a .beta.-1,3-glucanase) from tobacco is expressed in tissue undergoing hypersensitive response (HR) following tobacco mosaic virus (TMV) challenge and is induced by exogenous SA (Shah et al., Plant J. 10:1089-1101 (1996)). Region -364 to -288 in the PR-2d promoter confers SA sensitivity and a 25 bp element in this region is recognised by nuclear factors from tobacco. An SA responsive element has also been isolated from the CaMV 35S promoter at position -90 to -46. The element corresponds to an as-1 site (Qin et al., Plant Cell 6:863-874 (1994)). The sequence TCATCTTCTT (SEQ ID NO:8) is repeated several times in the barley .beta.-1,3-glucanase promoter and is present in over 30 stress-induced genes (Goldsbrough et al., Plant J. 3(4):563-571 (1993b)). This region binds 40 kDa tobacco nuclear proteins, the binding of which is increased in SA-treated plants. Buttner et al., Proc. Natl. Acad. Sci. USA 94:5961-5966 (1997) have shown that Arabidopsis ethylene responsive element binding proteins bind to the PR box and that PR- and G-boxes exhibit synergistic effects.

US-PAT-NO: 6841659

DOCUMENT-IDENTIFIER: US 6841659 B2

TITLE: Method for recovering proteins from the interstitial fluid of plant tissues

DATE-ISSUED: January 11, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Turpen; Thomas H.	Vacaville	CA	N/A	N/A
Garger; Stephen J.	Vacaville	CA	N/A	N/A
McCulloch; Michael J.	Vacaville	CA	N/A	N/A
Cameron; Terri I.	Suisun	CA	N/A	N/A
Samonek-Potter; Michelle L.	Davis	CA	N/A	N/A
Holtz; R. Barry	Vacaville	CA	N/A	N/A

APPL-NO: 10/ 632240

DATE FILED: August 1, 2003

PARENT-CASE:

This application is a continuation of U.S. patent application Ser. No. 10/119,330 filed Apr. 8, 2002, now U.S. Pat. No. 6,617,435, which is a continuation of application Ser. No. 09/726,648, filed Nov. 28, 2000, now U.S. Pat. No. 6,441,147; which is a continuation of application Ser. No. 09/500,554, filed Feb. 9, 2000, now U.S. Pat. No. 6,284,875; which is a continuation of U.S. application Ser. No. 09/132,989, filed Aug. 11, 1998, now abandoned.

US-CL-CURRENT: 530/427, 435/183 , 530/344 , 530/412 , 536/128 , 536/25.41 , 554/22

ABSTRACT:

A method for extracting proteins from the intercellular space of plants is provided. The method is applicable to the large scale isolation of many active proteins of interest synthesized by plant cells. The method may be used commercially to recover recombinantly produced proteins from plant hosts thereby making the large scale use of plants as sources for recombinant protein production feasible.

8 Claims, 8 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

---------- KWIC --------

Other Reference Publication - OREF (27):

Melchers et al., "Extracellular targeting of the vacuolar tobacco proteins AP24, chitinase and .beta.-1,3-glucanase in transgenic plants," Plant Molecular Biology 21:583-593 (1993).

US-PAT-NO: 6828493

DOCUMENT-IDENTIFIER: US 6828493 B1

TITLE: Wheat variety 25R47

DATE-ISSUED: December 7, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lively; Kyle Jay	Tipton	IN	N/A	N/A
Laskar; William Joseph	Tipton	IN	N/A	N/A
Marshall; Gregory Charles	Arcadia	IN	N/A	N/A
Clarkson; Robert Lewis	Tipton	IN	N/A	N/A

APPL-NO: 10/ 426679

DATE FILED: April 30, 2003

US-CL-CURRENT: 800/320.3, 435/421 , 435/430 , 435/430.1 , 800/260 , 800/278 , 800/279 , 800/281 , 800/284 , 800/288 , 800/300 , 800/302 , 800/303

ABSTRACT:

A wheat variety designated 25R47, the plants and seeds of wheat variety 25R47, methods for producing a wheat plant produced by crossing the variety 25R47 with another wheat plant, and hybrid wheat seeds and plants produced by crossing the variety 25R47 with another wheat line or plant, and the creation of variants by mutagenesis or transformation of variety 25R47. This invention also relates to methods for producing other wheat varieties or breeding lines derived from wheat variety 25R47 and to wheat varieties or breeding lines produced by those methods.

33 Claims, 0 Drawing figures

Exemplary Claim Number: 1

---------- KWIC ---------

Detailed Description Text - DETX (24):

Genes used to help reduce Fusarium Head Blight include but are not limited to Tri101(Fusarium), PDR5 (yeast), tlp-1(oat), tlp-2(oat), leaf tlp-1 (wheat), tlp (rice), tlp-4 (oat), endochitinase, exochitinase, glucanase (Fusarium), permatin (oat), seed hordothionin (barley), alpha-thionin (wheat), acid glucanase (alfalfa), chitinase (barley and rice), class beta II-1,3-glucanase (barley), PR5/tlp (arabidopsis), zeamatin (maize), type 1 RIP (barley), NPR1 (arabidopsis), lactoferrin (mammal), oxalyl-CoA-decarboxylase (bacterium), IAP(baculovirus), ced-9 (C. elegans), and glucanase (rice and barley).

US-PAT-NO: 6825405

DOCUMENT-IDENTIFIER: US 6825405 B1

TITLE: Wheat variety 26R58

DATE-ISSUED: November 30, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Marshall; Gregory Charles	Arcadia	IN	N/A	N/A
Lively; Kyle Jay	Tipton	IN	N/A	N/A
Laskar; William Joseph	Tipton	IN	N/A	N/A
Clarkson; Robert Lewis	Tipton	IN	N/A	N/A

APPL-NO: 10/ 426405

DATE FILED: April 30, 2003

US-CL-CURRENT: 800/320.3, 435/421 , 435/430 , 435/430.1 , 800/260 , 800/278 , 800/279 , 800/281 , 800/284 , 800/288 , 800/300 , 800/302 , 800/303

ABSTRACT:

A wheat variety designated 26R58, the plants and seeds of wheat variety 26R58, methods for producing a wheat plant produced by crossing the variety 26R58 with another wheat plant, and hybrid wheat seeds and plants produced by crossing the variety 26R58 with another wheat line or plant, and the creation of variants by mutagenesis or transformation of variety 26R58. This invention also relates to methods for producing other wheat varieties or breeding lines derived from wheat variety 26R58 and to wheat varieties or breeding lines produced by those methods.

33 Claims, 0 Drawing figures

Exemplary Claim Number: 1

---------- KWIC ---------

Detailed Description Text - DETX (24):

Genes used to help reduce Fusarium Head Blight include but are not limited to Tri101(Fusarium), PDR5 (yeast), tip-1(oat), tip-2(oat), leaf tip-1 (wheat), tip (rice), tip-4 (oat), endochitinase, exochitinase, glucanase (Fusarium), permatin (oat), seed hordothionin (barley), alpha-thionin (wheat), acid glucanase (alfalfa), chitinase (barley and rice), class beta II-1,3-glucanase (barley), PR5/tip (arabidopsis), zearatin (maize), type 1 RIP (barley), NPR1 (arabidopsis), lactoferrin (mammal), oxalyl-CoA-decarboxylase (bacterium), IAP(baculovinus), ced-9 (C. elegans), and glucanase (rice and barley).

US-PAT-NO: 6825404

DOCUMENT-IDENTIFIER: US 6825404 B1

TITLE: Wheat variety 25R78

DATE-ISSUED: November 30, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Clarkson; Robert Lewis	Tipton	IN	N/A	N/A
Laskar; William Joseph	Tipton	IN	N/A	N/A
Lively; Kyle Jay	Tipton	IN	N/A	N/A
Marshall; Gregory Charles	Arcadia	IN	N/A	N/A

APPL-NO: 10/ 212436

DATE FILED: August 5, 2002

US-CL-CURRENT: 800/320.3, 435/421 , 435/430 , 435/430.1 , 800/260 , 800/278 , 800/279 , 800/281 , 800/284 , 800/288 , 800/300 , 800/302 , 800/303

ABSTRACT:

A wheat variety designated 25R78, the plants and seeds of wheat variety 25R78, methods for producing a wheat plant produced by crossing the variety 25R78 with itself or with another wheat plant, and hybrid wheat seeds and plants produced by crossing the variety 25R78 with another wheat line or plant, and the creation of variants by mutagenesis or transformation of variety 25R78. This invention also relates to methods for producing other wheat varieties or breeding lines derived from wheat variety 25R78 and to wheat varieties or breeding lines produced by those methods.

33 Claims, 0 Drawing figures

Exemplary Claim Number: 1

---------- KWIC ---------

Detailed Description Text - DETX (27):

Genes used to help reduce Fusarium Head Blight include but are not limited to Tri101(Fusarium), PDR5 (yeast), tlp-1(oat), tip-2(oat), leaf tip-1 (wheat), tlp (rice), tlp-4 (oat), endochitinase, exochitinase, glucanase (Fusarium), permatin (oat), seed hordothionin (barley), .alpha.-thionin (wheat), acid glucanase (alfalfa), chitinase (barley and rice), class .beta.II-1,3-glucanase (barley), PR5/tlp (arabidopsis), zeamatin (maize), type 1 RIP (barley), NPR1 (arabidopsis), lactoferrin (mammal), oxalyl-CoA-decarboxylase (bacterium), IAP(baculovirus), ced-9 (C. elegans), and glucanase (rice and barley).

US-PAT-NO: 6818813

DOCUMENT-IDENTIFIER: US 6818813 B1

TITLE: Wheat variety 26R12

DATE-ISSUED: November 16, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Edge, III; Benjamin Elexy	Cayce	SC	N/A	N/A
Shields; Phil Lyman	Salisbury	MD	N/A	N/A
Marshall; Gregory Charles	Arcadia	IN	N/A	N/A
Lively; Kyle Jay	Tipton	IN	N/A	N/A
Laskar; William Joseph	Tipton	IN	N/A	N/A

APPL-NO: 10/ 426681

DATE FILED: April 30, 2003

US-CL-CURRENT: 800/320.3, 435/421 , 435/430 , 435/430.1 , 800/260 , 800/278 , 800/279 , 800/281 , 800/284 , 800/288 , 800/300 , 800/302 , 800/303

ABSTRACT:

A wheat variety designated 26R12, the plants and seeds of wheat variety 26R12, methods for producing a wheat plant produced by crossing the variety 26R12 with another wheat plant, and hybrid wheat seeds and plants produced by crossing the variety 26R12 with another wheat line or plant, and the creation of variants by mutagenesis or transformation of variety 26R12. This invention also relates to methods for producing other wheat varieties or breeding lines derived from wheat variety 26R12 and to wheat varieties or breeding lines produced by those methods.

33 Claims, 0 Drawing figures

Exemplary Claim Number: 1

---------- KWIC ---------

Detailed Description Text - DETX (24):

Genes used to help reduce Fusarium Head Blight include but are not limited to Tri101(Fusarium), PDR5 (yeast), tlp-1(oat), tlp-2(oat), leaf tlp-1 (wheat), tlp (rice), tlp-4(oat), endochitinase, exochitinase, glucanase (Fusarium), permatin (oat), seed hordothionin (barley), alpha-thionin (wheat), acid glucanase (alfalfa), chitinase (barley and rice), class beta II-1,3-glucanase (barley), PR5/tlp (arabidopsis), zeamatin (maize), type 1 RIP (barley), NPR1 (arabidopsis), lactoferrin (mammal), oxalyl-CoA-decarboxylase (bacterium), IAP(baculovirus), ced-9 (C. elegans), and glucanase (rice and barley).

US-PAT-NO: 6818803

DOCUMENT-IDENTIFIER: US 6818803 B1

TITLE: Transgenic plants as an alternative source of lignocellulosic-degrading enzymes

DATE-ISSUED: November 16, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Austin-Phillips; Sandra	Madison	WI	N/A	N/A
Burgess; Richard R.	Madison	WI	N/A	N/A
German; Thomas L.	Hollandale	WI	N/A	N/A
Ziegelhoffer; Thomas	Madison	WI	N/A	N/A

APPL-NO: 09/ 373272

DATE FILED: August 12, 1999

PARENT-CASE:

This is a continuation-in-part of application Ser. No. 08/883,495, filed Jun. 26, 1997 now U.S. Pat. No. 5,981,835.

US-CL-CURRENT: 800/278, 435/410 , 435/414 , 435/468 , 435/469 , 435/69.1 , 435/70.1 , 536/23.1 , 536/23.74 , 800/284 , 800/317.3

ABSTRACT:

Transgenic plants which express cellulose-degrading enzymes, methods to make the transgenic plants, and methods to use the cellulose-degrading enzymes produced by the transgenic plants are disclosed.

12 Claims, 14 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 12

---------- KWIC ---------

Detailed Description Text - DETX (114):

BIBLIOGRAPHY Adney et al. (1994), Cellulase assays. In: Enzymatic conversion of biomass for fuels production, Eds. M. E. Himmel, J. O. Baker & R. P. Overend. ACS symposium series 566. Aspegren et al. (1995), Secretion of a heat-stable fungal .beta.-glucanase from transgenic, suspension-cultured barley cells. Molecular Breeding 1:91-99. Baker et al. (1992), Thermal denaturation of T. reesei cellulases studied by differential scanning calorimetry and tryptophan fluorescence. Apply. Biochem. Biophys. 34:217-231. Bednarek (1991), The barley lectin carboxy-terminal peptide is a vacuolar protein sorting determinant in plants. The Plant Cell 3:1195-1206. Belkacemi et al. (1996), Enzymatic hydrolysis of timothy grass pretreated by ammonia fiber explosion. In: Liquid fuels and industrial products from renewable resources, Proceedings of the third liquid fuel conference, Eds. J. S. Cundiff, E. E. Gavett, C. Hansen, C. Peterson, M. A. Sanderson, H. Shapouri

& D. L. VanDyne. ASAE publication 08-96 pp 232-240. Bingham et al. (1975), Breeding alfalfa which regenerates from callus tissue in culture. Crop Sci. 15:719-721. Brown and Atanassov (1985), Role of genetic background in somatic embryogenesis in Medicago. Plant Cell Tissue Organ Culture 4:107-114. Carrer et al. (1993), Kanamycin resistance as a selectable marker for plastid transformation in tobacco. Mol. Gen. Genet. 241:49-56. Castillo et al. (1994), Rapid production of fertile transgenic plants of Rye. Bio/Technology 12:1366-1371. Cheng et al. (1990), Nucl. Acids Res. 18:5559. Comai et al. (1990), Novel and useful properties of a chimeric plant promoter combining CaMV 35S and MAS elements. Plant Mol. Biol. 15:373-381. Coughlan, M. P. (1988), Staining Techniques for the Detection of the Individual Components of Cellulolytic Enzyme Systems. Methods in Enzymology 160:135-144. Current Protocols in Molecular Biology, Volumes 1-3, Series Editor, Virginia Benson Chanda, .COPYRGT.1987-1997, John Wiley & Sons, Inc. de Castro Silva Filho et al. (1996), Mitochondrial and chloroplast targeting sequences in tandem modify protein import specificity in plant organelles. Plant Mol. Biol. 30:769-780. Divne et al. (1994), The three-dimensional crystal structure of the catalytic core of cellobiohydrolase I from Trichoderma reesei. Science 265:524-528. Ghangas & Wilson (1988), Cloning of the Thermomonospora fusca endoglucanase E2 gene in Streptomyces lividans: Affinity purification and functional domains of the cloned gene product. Appl. Envir. Microbiol. 54:2521-2526. Grohmann et al. (1992), Potential for fuels from biomass and wastes. In: Emerging technologies for materials and chemicals from biomass, Eds. R. M. Powell, T. P. Schultz and R. Narayan. ACS symposium series 576. Henrissat et al. (1995), Synergism of cellulases from Trichoderma reesei in the degradation of cellulose. Bio/Technology 3:722-726. Horsh et al. (1985), A simple and general method for transferring genes into plants. Science 227:1229-1231. Irwin et al. (1993), Activity studies of eight purified cellulases: Specificity, synergism, and binding domain effects. Biotechnol. Bioeng. 42:1002-1013. Irwin et al. (1999), Characterization of a Thermomonospora fusca family 48 exocellulase E6. Direct Genbank submission AF144563. Ishida et al. (1996), High efficiency transformation of maize mediated by Agrobacterium tumefaciens. Nature Biotechnology 14:745-750. Joliff et al. (1986), Nucleotide sequence of the cellulase gene celD encoding endoglucanse D of Clostridium thermocellum. Nucleic Acids Res. 14:8605-8613. Keegstra et al. (1993), Targeting of proteins into chloroplasts. Physiologia Plantarum 93:157-162. Lao et al. (1991), J. Bacteriol. 173:3397-3407. Liu and Doi (1998), Properties of exgS, a gene for a major subunit of the Clostridium cellolovorans cellulosome. Gene 211:39-47. Mason et al. (1988), Proteins homologous to leaf glycoproteins are abundant in stems of dark-grown soy bean seedlings. Analysis of proteins and cDNAs. Plant Mol. Biol. 11:845-856. McBride and Summerfelt (1990), Improved binary vectors for Agrobacterium mediated plant transformation. Plant Mol. Biol. 14:269-276. McBride et al. (1994), Controlled expression of plastid transgenes in plants based on a nuclear DNA-encoded and plastid-targeted T7 RNA polymerase. Proc. Natl. Acad. Sci. USA 91:7301-7305. Micelli et al. (1996), Integrated treatments of steam explosion and enzymatic hydrolysis to produce energetic and industrial products from lignocellulosic biomasses. Agro-food-Industry Hi-tech 7:25-28. Murashige and Skoog (1962), A revised medium for rapid growth and bioassays with tobacco tissue cultures. Physiol. Plant 15:473-497. Pentilla et al. (1987), Yeast 3:175-185. Shoemaker et al. (1983), Bio/Technology 1:691-696. Sonnewald et. al. (1991), Transgenic tobacco plants expressing yeast-derived invertase in either the cytosol, vacuole or apoplast: a powerful tool for studying sucrose metabolism and sink/source interactions. The Plant J. 1:95-106. Spezio et al. (1993), Crystal structure of the catalytic domain of a thermophilic endocellulase. Biochemistry 32:9906-9916. Tucker et al. (1989), Ultra-thermostable cellulases from Acidothermus cellulolyticus comparison of temperature optima with previously reported cellulases. Biotechnology 7:817-820. Vasil et al. (1993), Rapid production of transgenic wheat plants by

direct particle bombardment of cultured immature embyros. Bio/Technology 11:1553-1558. Wandelt et al. (1992), Vicilin with carboxy-terminal KDEL is retained in the endoplasmic reticulum and accumulates to high levels in the leaves of transgenic plants. Plant J. 2:181-192. Wong et al. (1986), Characterization of an endoglucanase gene cenA of Cellulomonas fimi. Gene 44:315-324. Zambryski, P., J. Tempe, and J. Schell (1989), Transfer and function of T-DNA genes from Agrobacterium Ti and Ri plasmids in plants. Cell 56:193-201. Zhang et al. (1995), Characterization of a Thermomonospora fusca exocellulase. Biochemistry 34:3386-3395.

Other Reference Publication - OREF (3):
Aspegren et al. (1995), Secretion of a heat-stable fungal .beta.-glucanase from transgenic, suspension-cultured barley cells. Molecular Breeding 1:91-99.

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FILE 'HOME' ENTERED AT 17:40:48 ON 28 JAN 2005

=> fil .bec,caba,agricola
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS,
       ESBIOBASE, BIOTECHNO, WPIDS, CABA, AGRICOLA'
ENTERED AT 17:41:08 ON 28 JAN 2005
ALL COPYRIGHTS AND RESTRICTIONS APPLY.  SEE HELP USAGETERMS FOR DETAILS.

13 FILES IN THE FILE LIST

=> s chitinase#
FILE 'MEDLINE'
L1        1847 CHITINASE#

FILE 'SCISEARCH'
L2        3607 CHITINASE#

FILE 'LIFESCI'
L3        1717 CHITINASE#

FILE 'BIOTECHDS'
L4        1077 CHITINASE#

FILE 'BIOSIS'
L5        4072 CHITINASE#

FILE 'EMBASE'
L6        1374 CHITINASE#

FILE 'HCAPLUS'
L7        4965 CHITINASE#

FILE 'NTIS'
L8          30 CHITINASE#

FILE 'ESBIOBASE'
L9        1676 CHITINASE#

FILE 'BIOTECHNO'
L10       1420 CHITINASE#

FILE 'WPIDS'
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FILE 'CABA'
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FILE 'AGRICOLA'
L13       1413 CHITINASE#

TOTAL FOR ALL FILES
L14      26267 CHITINASE#

=> s barley
FILE 'MEDLINE'
L15       5610 BARLEY

FILE 'SCISEARCH'
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L16      31007 BARLEY

FILE 'LIFESCI'
L17       6562 BARLEY

FILE 'BIOTECHDS'
L18       2057 BARLEY

FILE 'BIOSIS'
L19      45633 BARLEY

FILE 'EMBASE'
L20       3718 BARLEY

FILE 'HCAPLUS'
L21      47296 BARLEY

FILE 'NTIS'
L22       1299 BARLEY

FILE 'ESBIOBASE'
L23       7244 BARLEY

FILE 'BIOTECHNO'
L24       4377 BARLEY

FILE 'WPIDS'
L25       6871 BARLEY

FILE 'CABA'
L26      69068 BARLEY

FILE 'AGRICOLA'
L27      29694 BARLEY

TOTAL FOR ALL FILES
L28     260436 BARLEY

=> s glucanase#
FILE 'MEDLINE'
L29       1563 GLUCANASE#

FILE 'SCISEARCH'
L30       3470 GLUCANASE#

FILE 'LIFESCI'
L31       1618 GLUCANASE#

FILE 'BIOTECHDS'
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FILE 'BIOSIS'
L33       4376 GLUCANASE#

FILE 'EMBASE'
L34       1240 GLUCANASE#

FILE 'HCAPLUS'
L35       6032 GLUCANASE#

FILE 'NTIS'
L36         33 GLUCANASE#

FILE 'ESBIOBASE'
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L37       1309 GLUCANASE#

FILE 'BIOTECHNO'
L38       1283 GLUCANASE#

FILE 'WPIDS'
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FILE 'CABA'
L40       2392 GLUCANASE#

FILE 'AGRICOLA'
L41       1595 GLUCANASE#

TOTAL FOR ALL FILES
L42      27025 GLUCANASE#

=> s psi or protein synthesis inhibit?
FILE 'MEDLINE'
          6838 PSI
       1343750 PROTEIN
        396647 SYNTHESIS
       1153973 INHIBIT?
          8336 PROTEIN SYNTHESIS INHIBIT?
                 (PROTEIN(W)SYNTHESIS(W)INHIBIT?)
L43      15148 PSI OR PROTEIN SYNTHESIS INHIBIT?

FILE 'SCISEARCH'
         19881 PSI
       1155296 PROTEIN
        689308 SYNTHESIS
        942451 INHIBIT?
          3191 PROTEIN SYNTHESIS INHIBIT?
                 (PROTEIN(W)SYNTHESIS(W)INHIBIT?)
L44      23062 PSI OR PROTEIN SYNTHESIS INHIBIT?

FILE 'LIFESCI'
          3345 PSI
        454155 "PROTEIN"
        103658 "SYNTHESIS"
        314281 INHIBIT?
          1531 PROTEIN SYNTHESIS INHIBIT?
                 ("PROTEIN"(W)"SYNTHESIS"(W)INHIBIT?)
L45       4867 PSI OR PROTEIN SYNTHESIS INHIBIT?

FILE 'BIOTECHDS'
           747 PSI
        126672 PROTEIN
         21706 SYNTHESIS
         51144 INHIBIT?
            96 PROTEIN SYNTHESIS INHIBIT?
                 (PROTEIN(W)SYNTHESIS(W)INHIBIT?)
L46        841 PSI OR PROTEIN SYNTHESIS INHIBIT?

FILE 'BIOSIS'
          9364 PSI
       1434214 PROTEIN
        533522 SYNTHESIS
       1235757 INHIBIT?
          6218 PROTEIN SYNTHESIS INHIBIT?
                 (PROTEIN(W)SYNTHESIS(W)INHIBIT?)
L47      15558 PSI OR PROTEIN SYNTHESIS INHIBIT?

FILE 'EMBASE'
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       1319073 "PROTEIN"
        518664 "SYNTHESIS"
       1042696 INHIBIT?
          7689 PROTEIN SYNTHESIS INHIBIT?
                 ("PROTEIN"(W)"SYNTHESIS"(W)INHIBIT?)
L48      14495 PSI OR PROTEIN SYNTHESIS INHIBIT?

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         58945 PSI
       1704746 PROTEIN
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          5279 PROTEIN SYNTHESIS INHIBIT?
                 (PROTEIN(W)SYNTHESIS(W)INHIBIT?)
L49      64208 PSI OR PROTEIN SYNTHESIS INHIBIT?

FILE 'NTIS'
          6947 PSI
         12676 PROTEIN
         34824 SYNTHESIS
         20500 INHIBIT?
            49 PROTEIN SYNTHESIS INHIBIT?
                 (PROTEIN(W)SYNTHESIS(W)INHIBIT?)
L50       6996 PSI OR PROTEIN SYNTHESIS INHIBIT?

FILE 'ESBIOBASE'
          4820 PSI
        559838 PROTEIN
        146288 SYNTHESIS
        403848 INHIBIT?
          1709 PROTEIN SYNTHESIS INHIBIT?
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L51       6520 PSI OR PROTEIN SYNTHESIS INHIBIT?

FILE 'BIOTECHNO'
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        623255 PROTEIN
        144368 SYNTHESIS
        301415 INHIBIT?
          3588 PROTEIN SYNTHESIS INHIBIT?
                 (PROTEIN(W)SYNTHESIS(W)INHIBIT?)
L52       6691 PSI OR PROTEIN SYNTHESIS INHIBIT?

FILE 'WPIDS'
         12768 PSI
        123294 PROTEIN
         80346 SYNTHESIS
        227713 INHIBIT?
           147 PROTEIN SYNTHESIS INHIBIT?
                 (PROTEIN(W)SYNTHESIS(W)INHIBIT?)
L53      12913 PSI OR PROTEIN SYNTHESIS INHIBIT?

FILE 'CABA'
          3913 PSI
        331877 PROTEIN
         78330 SYNTHESIS
        214962 INHIBIT?
           711 PROTEIN SYNTHESIS INHIBIT?
                 (PROTEIN(W)SYNTHESIS(W)INHIBIT?)
L54       4623 PSI OR PROTEIN SYNTHESIS INHIBIT?

FILE 'AGRICOLA'
          1055 PSI
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        133688 PROTEIN
         39224 SYNTHESIS
         66126 INHIBIT?
           386 PROTEIN SYNTHESIS INHIBIT?
                 (PROTEIN(W)SYNTHESIS(W)INHIBIT?)
L55       1439 PSI OR PROTEIN SYNTHESIS INHIBIT?

TOTAL FOR ALL FILES
L56     177361 PSI OR PROTEIN SYNTHESIS INHIBIT?

=> s afp or antifungal protein
FILE 'MEDLINE'
          5788 AFP
         27674 ANTIFUNGAL
       1343750 PROTEIN
           118 ANTIFUNGAL PROTEIN
                 (ANTIFUNGAL(W)PROTEIN)
L57       5881 AFP OR ANTIFUNGAL PROTEIN

FILE 'SCISEARCH'
          3432 AFP
         16433 ANTIFUNGAL
       1155296 PROTEIN
           212 ANTIFUNGAL PROTEIN
                 (ANTIFUNGAL(W)PROTEIN)
L58       3616 AFP OR ANTIFUNGAL PROTEIN

FILE 'LIFESCI'
           773 AFP
          9752 "ANTIFUNGAL"
        454155 "PROTEIN"
            70 ANTIFUNGAL PROTEIN
                 ("ANTIFUNGAL"(W)"PROTEIN")
L59        828 AFP OR ANTIFUNGAL PROTEIN

FILE 'BIOTECHDS'
           195 AFP
          1279 ANTIFUNGAL
        126672 PROTEIN
            28 ANTIFUNGAL PROTEIN
                 (ANTIFUNGAL(W)PROTEIN)
L60        219 AFP OR ANTIFUNGAL PROTEIN

FILE 'BIOSIS'
          5047 AFP
         34180 ANTIFUNGAL
       1434214 PROTEIN
           206 ANTIFUNGAL PROTEIN
                 (ANTIFUNGAL(W)PROTEIN)
L61       5222 AFP OR ANTIFUNGAL PROTEIN

FILE 'EMBASE'
          5093 AFP
         24966 "ANTIFUNGAL"
       1319073 "PROTEIN"
            95 ANTIFUNGAL PROTEIN
                 ("ANTIFUNGAL"(W)"PROTEIN")
L62       5172 AFP OR ANTIFUNGAL PROTEIN

FILE 'HCAPLUS'
          3664 AFP
         24776 ANTIFUNGAL
       1704746 PROTEIN
           308 ANTIFUNGAL PROTEIN
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```
                (ANTIFUNGAL(W)PROTEIN)
L63        3927 AFP OR ANTIFUNGAL PROTEIN

FILE 'NTIS'
             84 AFP
            131 ANTIFUNGAL
          12676 PROTEIN
              0 ANTIFUNGAL PROTEIN
                (ANTIFUNGAL(W)PROTEIN)
L64           84 AFP OR ANTIFUNGAL PROTEIN

FILE 'ESBIOBASE'
           1249 AFP
           5356 ANTIFUNGAL
         559838 PROTEIN
            130 ANTIFUNGAL PROTEIN
                (ANTIFUNGAL(W)PROTEIN)
L65        1359 AFP OR ANTIFUNGAL PROTEIN

FILE 'BIOTECHNO'
           1356 AFP
           3941 ANTIFUNGAL
         623255 PROTEIN
             76 ANTIFUNGAL PROTEIN
                (ANTIFUNGAL(W)PROTEIN)
L66        1413 AFP OR ANTIFUNGAL PROTEIN

FILE 'WPIDS'
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          10393 ANTIFUNGAL
         123294 PROTEIN
             24 ANTIFUNGAL PROTEIN
                (ANTIFUNGAL(W)PROTEIN)
L67         338 AFP OR ANTIFUNGAL PROTEIN

FILE 'CABA'
            297 AFP
          25875 ANTIFUNGAL
         331877 PROTEIN
            125 ANTIFUNGAL PROTEIN
                (ANTIFUNGAL(W)PROTEIN)
L68         402 AFP OR ANTIFUNGAL PROTEIN

FILE 'AGRICOLA'
             60 AFP
           3636 ANTIFUNGAL
         133688 PROTEIN
             55 ANTIFUNGAL PROTEIN
                (ANTIFUNGAL(W)PROTEIN)
L69         100 AFP OR ANTIFUNGAL PROTEIN

TOTAL FOR ALL FILES
L70       28561 AFP OR ANTIFUNGAL PROTEIN


=> s l14(8a)(serratia or marcescens)
FILE 'MEDLINE'
           6846 SERRATIA
           5290 MARCESCENS
L71          88 L1 (8A)(SERRATIA OR MARCESCENS)

FILE 'SCISEARCH'
           4041 SERRATIA
           3129 MARCESCENS
```

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L72         110 L2  (8A)(SERRATIA OR MARCESCENS)

FILE 'LIFESCI'
          2454 SERRATIA
          1821 MARCESCENS
L73          71 L3  (8A)(SERRATIA OR MARCESCENS)

FILE 'BIOTECHDS'
          1050 SERRATIA
           601 MARCESCENS
L74          75 L4  (8A)(SERRATIA OR MARCESCENS)

FILE 'BIOSIS'
          9322 SERRATIA
          6606 MARCESCENS
L75         136 L5  (8A)(SERRATIA OR MARCESCENS)

FILE 'EMBASE'
          6965 SERRATIA
          4743 MARCESCENS
L76          73 L6  (8A)(SERRATIA OR MARCESCENS)

FILE 'HCAPLUS'
          8325 SERRATIA
          6287 MARCESCENS
L77         206 L7  (8A)(SERRATIA OR MARCESCENS)

FILE 'NTIS'
           144 SERRATIA
           114 MARCESCENS
L78          2 L8  (8A)(SERRATIA OR MARCESCENS)

FILE 'ESBIOBASE'
          1052 SERRATIA
           743 MARCESCENS
L79          59 L9  (8A)(SERRATIA OR MARCESCENS)

FILE 'BIOTECHNO'
          1615 SERRATIA
          1191 MARCESCENS
L80          60 L10(8A)(SERRATIA OR MARCESCENS)

FILE 'WPIDS'
          1257 SERRATIA
           528 MARCESCENS
L81          10 L11(8A)(SERRATIA OR MARCESCENS)

FILE 'CABA'
          1515 SERRATIA
           861 MARCESCENS
L82          58 L12(8A)(SERRATIA OR MARCESCENS)

FILE 'AGRICOLA'
           535 SERRATIA
           317 MARCESCENS
L83          28 L13(8A)(SERRATIA OR MARCESCENS)

TOTAL FOR ALL FILES
L84         976 L14(8A)(SERRATIA OR MARCESCENS)

=> s l14(8a)l28
FILE 'MEDLINE'
L85          25 L1  (8A)L15
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```
FILE 'SCISEARCH'
L86          54 L2 (8A)L16

FILE 'LIFESCI'
L87          20 L3 (8A)L17

FILE 'BIOTECHDS'
L88           9 L4 (8A)L18

FILE 'BIOSIS'
L89          60 L5 (8A)L19

FILE 'EMBASE'
L90          12 L6 (8A)L20

FILE 'HCAPLUS'
L91          87 L7 (8A)L21

FILE 'NTIS'
L92           1 L8 (8A)L22

FILE 'ESBIOBASE'
L93          28 L9 (8A)L23

FILE 'BIOTECHNO'
L94          17 L10(8A)L24

FILE 'WPIDS'
L95           2 L11(8A)L25

FILE 'CABA'
L96          49 L12(8A)L26

FILE 'AGRICOLA'
L97          16 L13(8A)L27

TOTAL FOR ALL FILES
L98         380 L14(8A) L28

=> s l42(8a)l28
FILE 'MEDLINE'
L99          72 L29(8A)L15

FILE 'SCISEARCH'
L100        178 L30(8A)L16

FILE 'LIFESCI'
L101         36 L31(8A)L17

FILE 'BIOTECHDS'
L102         34 L32(8A)L18

FILE 'BIOSIS'
L103        235 L33(8A)L19

FILE 'EMBASE'
L104         38 L34(8A)L20

FILE 'HCAPLUS'
L105        395 L35(8A)L21

FILE 'NTIS'
L106          0 L36(8A)L22
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FILE 'ESBIOBASE'
L107        50 L37(8A)L23

FILE 'BIOTECHNO'
L108        53 L38(8A)L24

FILE 'WPIDS'
L109        15 L39(8A)L25

FILE 'CABA'
L110       216 L40(8A)L26

FILE 'AGRICOLA'
L111        90 L41(8A)L27

TOTAL FOR ALL FILES
L112      1412 L42(8A) L28

=> s 156(8a)128
FILE 'MEDLINE'
L113        22 L43(8A)L15

FILE 'SCISEARCH'
L114        33 L44(8A)L16

FILE 'LIFESCI'
L115        14 L45(8A)L17

FILE 'BIOTECHDS'
L116         3 L46(8A)L18

FILE 'BIOSIS'
L117        49 L47(8A)L19

FILE 'EMBASE'
L118        10 L48(8A)L20

FILE 'HCAPLUS'
L119        63 L49(8A)L21

FILE 'NTIS'
L120         0 L50(8A)L22

FILE 'ESBIOBASE'
L121        10 L51(8A)L23

FILE 'BIOTECHNO'
L122        15 L52(8A)L24

FILE 'WPIDS'
L123         0 L53(8A)L25

FILE 'CABA'
L124        61 L54(8A)L26

FILE 'AGRICOLA'
L125        17 L55(8A)L27

TOTAL FOR ALL FILES
L126       297 L56(8A) L28

=> s 170(8a)(aspergillus or giganteus)
FILE 'MEDLINE'
         23406 ASPERGILLUS
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           242 GIGANTEUS
L127        25 L57(8A)(ASPERGILLUS OR GIGANTEUS)

FILE 'SCISEARCH'
         24579 ASPERGILLUS
           861 GIGANTEUS
L128        27 L58(8A)(ASPERGILLUS OR GIGANTEUS)

FILE 'LIFESCI'
         12591 ASPERGILLUS
           341 GIGANTEUS
L129        14 L59(8A)(ASPERGILLUS OR GIGANTEUS)

FILE 'BIOTECHDS'
          9291 ASPERGILLUS
            49 GIGANTEUS
L130         6 L60(8A)(ASPERGILLUS OR GIGANTEUS)

FILE 'BIOSIS'
         40195 ASPERGILLUS
          1781 GIGANTEUS
L131        27 L61(8A)(ASPERGILLUS OR GIGANTEUS)

FILE 'EMBASE'
         18719 ASPERGILLUS
           191 GIGANTEUS
L132        18 L62(8A)(ASPERGILLUS OR GIGANTEUS)

FILE 'HCAPLUS'
         45769 ASPERGILLUS
           680 GIGANTEUS
L133        31 L63(8A)(ASPERGILLUS OR GIGANTEUS)

FILE 'NTIS'
           222 ASPERGILLUS
            30 GIGANTEUS
L134         0 L64(8A)(ASPERGILLUS OR GIGANTEUS)

FILE 'ESBIOBASE'
          7382 ASPERGILLUS
           239 GIGANTEUS
L135        20 L65(8A)(ASPERGILLUS OR GIGANTEUS)

FILE 'BIOTECHNO'
          7725 ASPERGILLUS
           121 GIGANTEUS
L136        19 L66(8A)(ASPERGILLUS OR GIGANTEUS)

FILE 'WPIDS'
          6682 ASPERGILLUS
            23 GIGANTEUS
L137         3 L67(8A)(ASPERGILLUS OR GIGANTEUS)

FILE 'CABA'
         26679 ASPERGILLUS
           673 GIGANTEUS
L138        19 L68(8A)(ASPERGILLUS OR GIGANTEUS)

FILE 'AGRICOLA'
         12415 ASPERGILLUS
           270 GIGANTEUS
L139        14 L69(8A)(ASPERGILLUS OR GIGANTEUS)

TOTAL FOR ALL FILES
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L140       223 L70(8A)(ASPERGILLUS OR GIGANTEUS)

=> s (184 and (198 or 1112 or 1126 or 1140)) or (198 and (1112 or 1126 or 1140)) or
(1112 and (1126 or 1140)) or (1126 and 1140)
FILE 'MEDLINE'
L141         2 (L71 AND (L85 OR L99 OR L113 OR L127)) OR (L85 AND (L99 OR L113
               OR L127)) OR (L99 AND (L113 OR L127)) OR (L113 AND L127)

FILE 'SCISEARCH'
L142        10 (L72 AND (L86 OR L100 OR L114 OR L128)) OR (L86 AND (L100 OR
               L114 OR L128)) OR (L100 AND (L114 OR L128)) OR (L114 AND L128)

FILE 'LIFESCI'
L143         4 (L73 AND (L87 OR L101 OR L115 OR L129)) OR (L87 AND (L101 OR
               L115 OR L129)) OR (L101 AND (L115 OR L129)) OR (L115 AND L129)

FILE 'BIOTECHDS'
L144         1 (L74 AND (L88 OR L102 OR L116 OR L130)) OR (L88 AND (L102 OR
               L116 OR L130)) OR (L102 AND (L116 OR L130)) OR (L116 AND L130)

FILE 'BIOSIS'
L145        10 (L75 AND (L89 OR L103 OR L117 OR L131)) OR (L89 AND (L103 OR
               L117 OR L131)) OR (L103 AND (L117 OR L131)) OR (L117 AND L131)

FILE 'EMBASE'
L146         1 (L76 AND (L90 OR L104 OR L118 OR L132)) OR (L90 AND (L104 OR
               L118 OR L132)) OR (L104 AND (L118 OR L132)) OR (L118 AND L132)

FILE 'HCAPLUS'
L147        18 (L77 AND (L91 OR L105 OR L119 OR L133)) OR (L91 AND (L105 OR
               L119 OR L133)) OR (L105 AND (L119 OR L133)) OR (L119 AND L133)

FILE 'NTIS'
L148         0 (L78 AND (L92 OR L106 OR L120 OR L134)) OR (L92 AND (L106 OR
               L120 OR L134)) OR (L106 AND (L120 OR L134)) OR (L120 AND L134)

FILE 'ESBIOBASE'
L149         5 (L79 AND (L93 OR L107 OR L121 OR L135)) OR (L93 AND (L107 OR
               L121 OR L135)) OR (L107 AND (L121 OR L135)) OR (L121 AND L135)

FILE 'BIOTECHNO'
L150         4 (L80 AND (L94 OR L108 OR L122 OR L136)) OR (L94 AND (L108 OR
               L122 OR L136)) OR (L108 AND (L122 OR L136)) OR (L122 AND L136)

FILE 'WPIDS'
L151         2 (L81 AND (L95 OR L109 OR L123 OR L137)) OR (L95 AND (L109 OR
               L123 OR L137)) OR (L109 AND (L123 OR L137)) OR (L123 AND L137)

FILE 'CABA'
L152        10 (L82 AND (L96 OR L110 OR L124 OR L138)) OR (L96 AND (L110 OR
               L124 OR L138)) OR (L110 AND (L124 OR L138)) OR (L124 AND L138)

FILE 'AGRICOLA'
L153         1 (L83 AND (L97 OR L111 OR L125 OR L139)) OR (L97 AND (L111 OR
               L125 OR L139)) OR (L111 AND (L125 OR L139)) OR (L125 AND L139)

TOTAL FOR ALL FILES
L154        68 (L84 AND (L98 OR L112 OR L126 OR L140)) OR (L98 AND (L112 OR
               L126 OR L140)) OR (L112 AND (L126 OR L140)) OR (L126 AND L140)

=> s (114 and (142 or 156 or 170)) or (142 and (156 or 170)) or (156 and 170)
FILE 'MEDLINE'
L155       208 (L1 AND (L29 OR L43 OR L57)) OR (L29 AND (L43 OR L57)) OR (L43
               AND L57)
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FILE 'SCISEARCH'
L156       807 (L2 AND (L30 OR L44 OR L58)) OR (L30 AND (L44 OR L58)) OR (L44
               AND L58)

FILE 'LIFESCI'
L157       291 (L3 AND (L31 OR L45 OR L59)) OR (L31 AND (L45 OR L59)) OR (L45
               AND L59)

FILE 'BIOTECHDS'
L158       173 (L4 AND (L32 OR L46 OR L60)) OR (L32 AND (L46 OR L60)) OR (L46
               AND L60)

FILE 'BIOSIS'
L159       865 (L5 AND (L33 OR L47 OR L61)) OR (L33 AND (L47 OR L61)) OR (L47
               AND L61)

FILE 'EMBASE'
L160       137 (L6 AND (L34 OR L48 OR L62)) OR (L34 AND (L48 OR L62)) OR (L48
               AND L62)

FILE 'HCAPLUS'
L161       970 (L7 AND (L35 OR L49 OR L63)) OR (L35 AND (L49 OR L63)) OR (L49
               AND L63)

FILE 'NTIS'
L162         2 (L8 AND (L36 OR L50 OR L64)) OR (L36 AND (L50 OR L64)) OR (L50
               AND L64)

FILE 'ESBIOBASE'
L163       323 (L9 AND (L37 OR L51 OR L65)) OR (L37 AND (L51 OR L65)) OR (L51
               AND L65)

FILE 'BIOTECHNO'
L164       237 (L10 AND (L38 OR L52 OR L66)) OR (L38 AND (L52 OR L66)) OR (L52
               AND L66)

FILE 'WPIDS'
L165       140 (L11 AND (L39 OR L53 OR L67)) OR (L39 AND (L53 OR L67)) OR (L53
               AND L67)

FILE 'CABA'
L166       671 (L12 AND (L40 OR L54 OR L68)) OR (L40 AND (L54 OR L68)) OR (L54
               AND L68)

FILE 'AGRICOLA'
L167       328 (L13 AND (L41 OR L55 OR L69)) OR (L41 AND (L55 OR L69)) OR (L55
               AND L69)

TOTAL FOR ALL FILES
L168      5152 (L14 AND (L42 OR L56 OR L70)) OR (L42 AND (L56 OR L70)) OR (L56
               AND L70)

=> s l168 and synerg?
FILE 'MEDLINE'
         80645 SYNERG?
L169        11 L155 AND SYNERG?

FILE 'SCISEARCH'
         53635 SYNERG?
L170        23 L156 AND SYNERG?

FILE 'LIFESCI'
         18915 SYNERG?
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L171        13 L157 AND SYNERG?

FILE 'BIOTECHDS'
          1600 SYNERG?
L172        14 L158 AND SYNERG?

FILE 'BIOSIS'
         59452 SYNERG?
L173        23 L159 AND SYNERG?

FILE 'EMBASE'
         46992 SYNERG?
L174         6 L160 AND SYNERG?

FILE 'HCAPLUS'
         96081 SYNERG?
L175        39 L161 AND SYNERG?

FILE 'NTIS'
          3441 SYNERG?
L176         0 L162 AND SYNERG?

FILE 'ESBIOBASE'
         20522 SYNERG?
L177        10 L163 AND SYNERG?

FILE 'BIOTECHNO'
         16242 SYNERG?
L178         9 L164 AND SYNERG?

FILE 'WPIDS'
         22713 SYNERG?
L179         8 L165 AND SYNERG?

FILE 'CABA'
         15093 SYNERG?
L180        16 L166 AND SYNERG?

FILE 'AGRICOLA'
          4773 SYNERG?
L181        11 L167 AND SYNERG?

TOTAL FOR ALL FILES
L182       183 L168 AND SYNERG?

=> s l168 and transgen?
FILE 'MEDLINE'
         55884 TRANSGEN?
L183        23 L155 AND TRANSGEN?

FILE 'SCISEARCH'
         79923 TRANSGEN?
L184       148 L156 AND TRANSGEN?

FILE 'LIFESCI'
         28767 TRANSGEN?
L185        30 L157 AND TRANSGEN?

FILE 'BIOTECHDS'
         28826 TRANSGEN?
L186        80 L158 AND TRANSGEN?

FILE 'BIOSIS'
         73104 TRANSGEN?
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L187        71 L159 AND TRANSGEN?

FILE 'EMBASE'
         43726 TRANSGEN?
L188        10 L160 AND TRANSGEN?

FILE 'HCAPLUS'
         73413 TRANSGEN?
L189       119 L161 AND TRANSGEN?

FILE 'NTIS'
           722 TRANSGEN?
L190         0 L162 AND TRANSGEN?

FILE 'ESBIOBASE'
         37659 TRANSGEN?
L191        31 L163 AND TRANSGEN?

FILE 'BIOTECHNO'
         34613 TRANSGEN?
L192        30 L164 AND TRANSGEN?

FILE 'WPIDS'
         13765 TRANSGEN?
L193        36 L165 AND TRANSGEN?

FILE 'CABA'
         27996 TRANSGEN?
L194        75 L166 AND TRANSGEN?

FILE 'AGRICOLA'
         15151 TRANSGEN?
L195        35 L167 AND TRANSGEN?

TOTAL FOR ALL FILES
L196       688 L168 AND TRANSGEN?

=> s (l154 or l182 or l196) not 1994-2005/py
FILE 'MEDLINE'
       5310295 1994-2005/PY
L197         5 (L141 OR L169 OR L183) NOT 1994-2005/PY

FILE 'SCISEARCH'
      10519617 1994-2005/PY
L198        32 (L142 OR L170 OR L184) NOT 1994-2005/PY

FILE 'LIFESCI'
       1175569 1994-2005/PY
L199         5 (L143 OR L171 OR L185) NOT 1994-2005/PY

FILE 'BIOTECHDS'
        193002 1994-2005/PY
L200        16 (L144 OR L172 OR L186) NOT 1994-2005/PY

FILE 'BIOSIS'
       5977836 1994-2005/PY
L201        17 (L145 OR L173 OR L187) NOT 1994-2005/PY

FILE 'EMBASE'
       4738135 1994-2005/PY
L202         2 (L146 OR L174 OR L188) NOT 1994-2005/PY

FILE 'HCAPLUS'
       9538264 1994-2005/PY
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L203        20 (L147 OR L175 OR L189) NOT 1994-2005/PY

FILE 'NTIS'
        298301 1994-2005/PY
L204         0 (L148 OR L176 OR L190) NOT 1994-2005/PY

FILE 'ESBIOBASE'
       2790557 1994-2005/PY
L205         0 (L149 OR L177 OR L191) NOT 1994-2005/PY

FILE 'BIOTECHNO'
       1134160 1994-2005/PY
L206         1 (L150 OR L178 OR L192) NOT 1994-2005/PY

FILE 'WPIDS'
       7438241 1994-2005/PY
L207         0 (L151 OR L179 OR L193) NOT 1994-2005/PY

FILE 'CABA'
       1783451 1994-2005/PY
L208        21 (L152 OR L180 OR L194) NOT 1994-2005/PY

FILE 'AGRICOLA'
        671248 1994-2005/PY
L209         6 (L153 OR L181 OR L195) NOT 1994-2005/PY

TOTAL FOR ALL FILES
L210       125 (L154 OR L182 OR L196) NOT 1994-2005/PY

=> log y
COST IN U.S. DOLLARS                        SINCE FILE      TOTAL
                                               ENTRY    SESSION
FULL ESTIMATED COST                            39.77      39.98

STN INTERNATIONAL LOGOFF AT 17:54:02 ON 28 JAN 2005
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